

Faculty of Engineering & Technology

B.E. (Evening) - (Civil / Electrical / Mechanical)

I - Physical Sciences

**Compulsory
for all
branches**

Mathematics	Algebra, Trigonometry, Coordinate Geometry, Calculus, Differential Equations, Vector
Physics	Heating & Chemical effects of current; Thermo-electric effects; SHM, Velocity, acceleration and Types of waves, frequency, wave length and wave velocity, Diffraction and polarization of waves, Cathodes and X-rays, Radioactivity, Nuclear fusion and fission
Chemistry	Organic Chemistry, Electrochemistry, pH Value and buffer solution, Corrosion, Alloys, Fuels, Water, Environmental Chemistry and Polymers.

II - Engineering Sciences

(A) B.E. - (Civil Engg.)

Structural Analysis	Stresses and Strains, Bending moment and shear force, Bending Stresses, Columns, Steel Truss - Simple analysis of steel trusses.
Design of R.C. Structure	Singly & Doubly Reinforced Beam, Slabs, T-Beam, Columns & Footings
Building Materials and Construction	Building Materials Building Construction
Irrigation Engineering	Flow of Water Flow over notches and weirs Flow through Open Channels Methods of Irrigation River training & Cross Drainage Works Dams Canal masonry works.
Environmental Engineering	Water supply Engineering Sanitary Engineering
Transportation Engineering :	
Roads	Highway Geometric Design, Highway materials & Constructions, Pavement Design, Traffic Engineering
Railways	Gauges, Sleepers, Plate Laying, Ballast, Points & Crossings, Train Resistance
Bridges	Type of Bridges, Loads on Bridges, Design of Bridges

Soil Mechanics	Index Properties Permeability Consolidation &	Shear and Strength and Seepage Compaction
Surveying	Chain Surveying Plane Table Surveying Theodolite Traversing	Compass Surveying Levelling

<u>(B) B.E. (Electrical Engineering)</u>

(B) B.E. (Electrical Engg.)	Fields and Circuits	Magnetic Field due to current, Ohm's and Kirchhoff's Laws, Faraday's Law of Magnetic Induction
	Electrical Machines and Power Apparatus	Transformer, D.C. Machines Induction Motor Synchronous Machines Distribution & Transmission Systems.
	Instrumentation and Control	PMMC, PI, Dynamometer type instruments, bridges, CRO, Transducers, Time domain and frequency domain analysis, controllers.
	Electronics	Binary numbers, logic gates transistors, diodes, OPAMP, display devices, telemetry.

**(C) B.E.
(Mechanical Engg.)**

- Theory and Design of Machines
- Hydraulic and Pneumatic Machines
- Thermodynamics and H.P. Engineering
- Production and Industrial Engineering